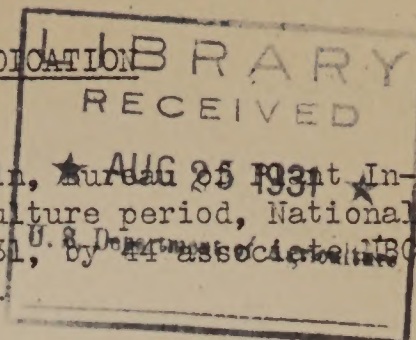


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PROGRESS IN WHITE PINE BLISTER RUST ERADICATION



A radio interview conducted with Dr. J. F. Martin, Bureau of Plant Industry, by Morse Salisbury, in the Department of Agriculture period, National Farm and Home Hour, broadcast Wednesday, August 12, 1931, by 44 associated radio stations.

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SALISBURY:

Last week, Dr. Fracker of the Plant Quarantine and Control Administration told us, among others, about the quarantine against white pine blister rust.

Today we'll learn about the campaign to control the disease. Timber owners, local governments, State governments, and the Federal Government all take part in the drive against the white pine blister rust. The disease threatens standing timber estimated to be worth about half a billion dollars.

The plan of campaign against it was worked out by the Bureau of Plant Industry. The directing staff is the blister rust control division of that bureau. Dr. James F. Martin of that division is in charge of the Eastern program of control, and today will tell us of recent progress in the work.

Dr. Martin, is the blister rust spreading to new territory?

DR. MARTIN:

It is gradually spreading by natural means, into the States bordering the infested region. Our scouts have just found local centers of infection in Maryland and Ohio.

SALISBURY:

I suppose you'll be right after those danger spots?

DR. MARTIN:

As soon as possible arrangements will be made with the State authorities for the application of such measures as may be required to control the disease.

SALISBURY:

Will you give us, please, the significant facts about the progress of blister rust control last year, Dr. Martin?

DR. MARTIN:

Well, before I begin quoting statistics, I think I had better explain the method of control.

SALISBURY:

By all means, Dr. Martin.

DR. MARTIN:

Well, then The blister rust disease lives part of the time on one plant; part of the time on another. The alternate hosts of the blister rust are the white pine, and the plants of the genus Ribes -- otherwise, currants and gooseberries. The spores of the disease are carried from pine trees by the wind a hundred miles or more to Ribes plants. But the spores carrying the disease from the Ribes back to pine trees seldom travel more than nine hundred feet. So we control the disease by destroying Ribes plants within infecting distance of white pines. That means, as I've said, Ribes plants within 900 feet of white pines. Now in the Eastern United States that distance applies to all except the most susceptible species. This species is the cultivated black currant. It will endanger pines a mile away.

SALISBURY:

Well, I think we've got the method of control down pat now. Will you give us the results of the past year's work?

DR. MARTIN:

Let's give those results by zones. In the East there really are two zones. One is the area where the infestation is oldest -- New York and New England. Naturally, control work is furthest advanced there. The second Eastern area includes Pennsylvania, New Jersey, and the Lake States.

Then, in the West, we have the western white pine region of the Inland Empire, and the sugar pine region of Southern Oregon and California.

SALISBURY:

All right, what were the results of the year just passed in New York and New England?

DR. MARTIN:

I suppose they had best be expressed in terms of acres cleared of Ribes and number of Ribes plants destroyed. Those figures are 722 thousand, acres on which over 7 million Ribes were uprooted and destroyed.

SALISBURY:

And that brings the total in New York and New England to

DR. MARTIN:

Eight million 400 thousand, acres. On this acreage over 82 million Ribes have been destroyed. Perhaps you'll get a clearer idea of the situation when I tell you that now we look for all the initial control work in these States to be completed within the next few years.

SALISBURY:

You'll have the disease eradicated then?

DR. MARTIN:

No indeed. It is impossible to eradicate the disease. We'll have gone once over all the area bearing white pine worth protection and removed the Ribes plants. This will establish control of the disease. In order to maintain this control, the protected areas must be kept free of Ribes. This will be done by periodic re-checking of the areas and systematically destroying any Ribes that were missed or that have grown from seeds or sprouts. So far, the first time over, the cost has averaged 20 cents per acre, and it will be much less the second time over. Continued protection of the white pine from blister rust should not cost more than 5 cents per acre per year.

SALISBURY:

How about Pennsylvania, New Jersey, and the Lake States?

DR. MARTIN:

Including last year's work, the total area in those States freed of Ribes is more than 64 thousand acres. The rust is becoming well established in these States, and control measures are becoming increasingly necessary to protect the native pine and the accumulating acreage of white pine resulting from the reforestation of idle lands. In some areas, white pine is replacing to some extent the chestnut lost through the ravages of the chestnut blight.

SALISBURY:

Do these figures on Eastern acreage freed of Ribes include National Forests and National Parks in those States?

DR. MARTIN:

No. We tabulate them separately. That adds another 13 thousand acres to the protected area.

SALISBURY:

What were the results of the work in the West last year?

DR. MARTIN:

In the West the disease is just reaching the valuable white pine forests. Since its discovery there in 1921, we have been keeping track of its spread and developing practical measures for its control. You see, there^{are} about 80 species of Ribes scattered throughout the West, to spread the disease as against 13 in the East. The forest country is far more inaccessible. Both pines are more susceptible to the rust and some of the Ribes occur locally in great abundance. The costs of eradicating Ribes therefore are somewhat higher in the West.

Our field studies completed late in the season of 1930 showed that the rust is now spreading and intensifying so rapidly, that three million acres of western white pine in Northern Idaho and adjacent Washington and Montana will suffer maximum damage from the rust in the next 10 to 15 years unless we get vigorously after it. That means we'll have to eradicate Ribes from about 300 thousand acres a year for the next 10 years in order to assure protection to these valuable forests and thus safeguard the lumber industry which is the basis of the economic life of the region. Lumber is the life-blood of this region's commerce, and white pine represents 75 per cent of the value of its forest products.

SALISBURY:

What is the situation in the sugar pine areas of Southern Oregon and of California?

DR. MARTIN:

Last year's scouting results showed that the disease is gradually extending southward through Oregon toward the commercial sugar pine areas in California. It is not in those areas yet, however. By the way, we have been eradicating all cultivated black currants in the western white and sugar pine regions for some years now, to delay the spread of the disease. This job is completed now.

SALISBURY:

Well, Dr. Martin, to sum up, what are the outstanding facts about control of the blister rust disease as the situation stands now?

DR. MARTIN:

I should set them down about like this:

First, we are within a few years of completing the first-time-over eradication of Ribes in the white pine areas of the New England-New York region.

Second, in the New Jersey-Pennsylvania-Lake States region the rust is becoming more prevalent; the need for eradication of the wild Ribes is recognized, and control work is gradually increasing to meet the situation.

Third, in the Inland Empire western white pine region of the Pacific Northwest, it has become apparent that we shall have to eradicate Ribes from 3 million acres within the next 10 years to prevent enormous damage to the forests and dependent industries. Our preliminary experimental work has given us practical methods of destroying Ribes with chemicals which may speed up this job, and actual control work on a large scale is starting this year.

Fourth, the disease has not yet reached the main Southern Oregon-California sugar pine belt, but is gradually approaching it. We are preparing to fight it there eventually by experimentally working out and developing practical control measures for this region.